

# Kentucky Information Technology Standards (KITS)

## Full KITS Report - Word Search

EAS Code	EAS Category Name	Standard	KITS Category Code	KITS Domain > Area > Category	KITS Description	Approved Products	Date
7005	Naming Conventions	While there is no current standardized naming convention, please see the suggested “Best Practice” statement on pages 11 and 12 of the document at <a href="https://gotsource.ky.gov/docushare/dsweb/Get/Document-301114/">https://gotsource.ky.gov/docushare/dsweb/Get/Document-301114/</a>	B10.811.339	General Government > Information sharing > Information Mapping / Taxonomy / Categorization	Information Mapping/ Taxonomy/ Categorization defines the set of capabilities to support the creation and maintenance of relationships between data entities, naming standards and categorization and allow classification of data and information into specific layers or types to support an organization.		<b>Effective:</b> 5/10/1999 <b>Revised:</b> 6/17/2015 <b>Reviewed:</b> 6/17/2015

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7010	Internet Domain Naming Conventions	<p>Internet Engineering Task Force (IETF) Informational RFC 2146 41 CFR Part 102-173</p> <p>Jurisdiction of the Internet .GOV domain is available to federal, state and local governments as well as Native Sovereign Nations (NSNs). As required by the U.S. General Services Administration (GSA) for second-level domain registration, states “must register the full state name or clearly indicate the State postal code within the name.”</p> <p>The Commonwealth Office of Technology is the authoritative source for registration of the second-, third-, and fourth-level .GOV domain for state agencies. (Domain Name System (DNS) Request form) The suffix .kentucky.gov is reserved for use only on the state home page and certain directly associated pages.</p> <p>Both .ky.gov and .state.ky.us are second-level domains that are reserved and approved for Kentucky state government. (Note that name .state.ky.us is scheduled for obsolescence in use for public display based on sunset dates.)</p> <p>At the third level, agencies are permitted to use agency names or program names. If multiple domain names are created, one of the names should be considered primary, used to promote the site and any others should redirect to that name.</p> <p>The following naming conventions are approved:</p> <p>agency_name or program name.ky.gov</p> <p>Examples: Transportation.ky.gov, KYTC.ky.gov, KYTransportation.ky.gov</p> <p>Examples: taxamnesty.revenue.ky.gov, taxamnesty.ky.gov, 511.ky.gov</p> <p>The agency name can be a cabinet, department, or division name, in whatever format the agency chooses - acronym, full name, natural words, etc.</p>	B10.811.339	General Government > Information sharing > Information Mapping / Taxonomy / Categorization	Information Mapping/ Taxonomy/ Categorization defines the set of capabilities to support the creation and maintenance of relationships between data entities, naming standards and categorization and allow classification of data and information into specific layers or types to support an organization.		<p><b>Effective:</b> 2/14/2003</p> <p><b>Revised:</b> 6/17/2015</p> <p><b>Reviewed:</b> 6/17/2015</p>

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7010		Agency names can include ky or k as a prefix, although this redundant usage is not recommended. For additional information related to this standard, please see the suggested “Best Practice” statement on page 13 of the document at <a href="https://gotsource.ky.gov/docushare/dsweb/Get/Document-301114/">https://gotsource.ky.gov/docushare/dsweb/Get/Document-301114/</a>					
7015	Electronic Mail Address Naming Convention	For state government e-mail accounts, the following e-mail naming convention is approved for primary addresses: firstname.lastname@ky.gov distribution_lastname@ky.gov Agency distribution listings which allow a search on the Global Address Book to provide a listing of all persons within that agency. Formats: AgencyName@ky.gov, Agency.distribution_name@ky.gov As the state’s domain name registrar and shared services provider of enterprise e-mail, COT will manage and authorize the assignment of ky.gov e-mail addressing. To maintain e-mail domain name integrity, eligibility for ky.gov-based e-mail addresses is limited to qualified state government organizations. Non-unique name combinations will be handled through combinations of initials that render names unique and distinguishable.	B10.813.659	General Government > Support delivery of state services > Email	Defines the set of capabilities to support the transmission of communications over a network. Includes instant messaging	<ul style="list-style-type: none"><li>• Microsoft Exchange Server</li><li>• Microsoft Outlook Client</li></ul>	<b>Effective:</b> 10/1/2003  <b>Revised:</b> 1/20/2010  <b>Reviewed:</b> 6/17/2015

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7020	Internet / World Wide Web Design and Publishing	<p>Web technologies considered current standards include most current version per W3C:</p> <ul style="list-style-type: none"> <li>• Hypertext Markup Language - HTML</li> <li>• Extensible Hypertext Markup Language - XHTML</li> <li>• Cascading Style Sheet - CSS</li> <li>• Document Object Model - DOM</li> <li>• Synchronized Multimedia Integration Language - SMIL</li> <li>• JavaScript &amp; Dynamic HTML – DHTML.</li> </ul> <p>Web Page Construction: The Enterprise Web Design Template and supporting style sheets are provided as a starting point for use in creation of all externally-presented entity pages (exclusive of online applications), and for the replacement of existing pages. Template and supporting style sheets may be found at KY Enterprise Web Design Template.</p> <p>Note: The use of other technologies (e.g., Java, Flash) and other document formats (e.g., Adobe Acrobat PDF, Microsoft Word) is permissible when used with the above- referenced design template.</p> <p>External Links: Links to Internet resources external to State Government are encouraged, where appropriate. COT Agency Contact Memo 9805-05 - Policy, Procedures and Guidelines for Approving External Internet Links. GSA guidelines relating to link changes that direct .gov site users to non-.gov sites require all such links to include explicit notification of such re-direction, either within text accompanying the links or as a splash page.</p> <p>Banner Ads: The placement of banner ads and Web site advertising are currently prohibited, as communicated in the CIO policy directive, May 22, 2000, “Moratorium on Banner Advertising on State Web sites.” In this memorandum it is noted that while</p>	B10.813.326	General Government > Support delivery of state services > IT System Development / Integration Support	IT System Development / Integration Support includes the software services enabling elements of distributed business applications to interoperate and the software development necessary to facilitate such integration. These elements can share function, content, and communications across heterogeneous computing environments.	<p>Must comply with KY Enterprise Web Design Template.</p> <p>Must comply with approved Web Browser standards.</p>	<p><b>Effective:</b> 5/2/2002</p> <p><b>Revised:</b> 6/17/2015</p> <p><b>Reviewed:</b> 6/17/2015</p>

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7020		<p>opportunities may appear very desirable on the surface, there are complex policy issues associated with accepting vendor-sponsored web advertising. GSA guidelines referenced immediately above also forbid such advertising.</p> <p>Metadata: Specific tags are required to meet accessibility requirements, and these are to be defined in a subsequent standard (702x). Government Information Locator Services (GILS) metatags have been adopted by the Kentucky Department for Libraries and Archives GILS program, although agency participation in this program is not currently required.</p>					

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7025	Accessibility for Internet / World Wide Web Design and Publishing	<p>The Commonwealth of Kentucky incorporates into its Web Accessibility Standard (WAS) all applicable federal and state laws, including Section 508 of the Federal Rehabilitation Act (1986) (see <a href="http://www.access-board.gov/508.htm">http://www.access-board.gov/508.htm</a> and <a href="http://www.section508.gov">http://www.section508.gov</a>), and the World Wide Web Consortium (W3C), Web Accessibility Initiative (WAI), Web Content Accessibility Guidelines (WCAG) 1.0, Conformance Level Double-A.</p> <p>New web pages and major updates to existing web pages will abide by these standards and guidelines effective immediately upon the adoption of the standard. All existing web pages produced by Commonwealth of Kentucky agencies should already meet these standards, since the compliance level has not changed since 2001. The standard applies to all web pages created by Commonwealth of Kentucky agencies. In addition, Kentucky is taking the following steps to ensure accessibility of web pages provided by third-party developers:</p> <ul style="list-style-type: none"> <li>• informing third-party developers of Kentucky's Web Accessibility Standard;</li> <li>• providing information and resources on implementing Kentucky's Web Accessibility Standard;</li> <li>• monitoring and providing feedback on inaccessible third-party web pages created for the Commonwealth of Kentucky;</li> <li>• seeking alternative third-party developers where the original developers continue to produce inaccessible web pages.</li> </ul> <p>All Commonwealth of Kentucky Government web pages will contain a link to this policy. This policy will be reviewed and updated as changes occur in the laws, standards or technologies.</p>	A02.022.245	Application Components > Development Environment and Tools > Validation Tools	Software tools that check web pages for accessibility and syntactical correctness of code.	<p>KY Enterprise Web Design Template</p> <p>For design products, review the standard on recommended authoring tools, Enterprise Standard for HTML Authoring and Web Publishing.</p> <p>Recommended graphics tools are provided in Standard for Advanced Drawing – Drawing / Illustration / Diagramming.</p> <p>For automatic accessibility validators, no tool can validate all the requirements necessary. There are a number of subjective requirements that a tool cannot test. For example, Section 508(c) states, "Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup." No tool can verify this. It is up to the agency to verify that this requirement and other subjective requirements are met. There are numerous online sites that can validate a page, and various tools can be used to validate an entire site. While the online tools are beneficial during development of a site, it is necessary to do a thorough validation of an entire site prior to production release. Validation documentation should be kept with a site's project documentation.</p> <p>Compliance Sheriff is available as an Enterprise-wide validation tool for testing and reporting accessibility, privacy, search ability and usability standard.</p> <p>Approved Products:</p> <ul style="list-style-type: none"> <li>• Compliance Sheriff (HiSoftware)</li> <li>• InFocus (SSB BART Group)</li> <li>• Rational Policy Tester</li> </ul>	<p><b>Effective:</b> 5/2/2002</p> <p><b>Revised:</b> 6/17/2015</p> <p><b>Reviewed:</b> 6/17/2015</p>

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7025						Accessibility Edition (IBM)	
7360	Electronic Commerce – Magnetic Stripe Card and Reader	ISO (International Organization for Standardization) approved standard for encoding magnetic stripe data is required to interface with standard readers and the bankcard network for online transaction processing. ISO compliant stripe card readers are required.	I01.004.402	Platform > Peripheral > Computer Input Device	Inputs are the signals or data received by the system, and outputs are the signals or data sent from it. For the purposes of the IRM, computer input devices are those that provide data to the machine/application combination for further processing or for manipulation by users through the human-computer interface devices.		<b>Effective:</b> 7/1/1997  <b>Revised:</b> 11/10/2000  <b>Reviewed:</b> 6/17/2015
7400	PBX – Telephone Public Exchange	The Commonwealth of Kentucky has adopted a standard of two manufacturers of Telephony PBX systems, Avaya and Tadiran. This standard has been established to reduce expenditures in maintaining replacement/repair inventory and in training costs of personnel and associated expenditures.	I01.003.KY003	Platform > Communications Hardware > PBX (Private Branch Exchange)	A PBX (Private Branch Exchange) is a telephone system within an enterprise that switches calls between enterprise users on local lines while allowing all users to share a certain number of external phone lines.	Approved Avaya products are: <ul style="list-style-type: none"> <li>• Business Communications Manager (BCM) Series,</li> <li>• Communication Server (CS) 1000 Series, CS2100,</li> <li>• and related survivable Gateways.</li> </ul> Approved Tadiran products are: <ul style="list-style-type: none"> <li>• Coral</li> </ul> Octel is approved for existing replacement only.	<b>Effective:</b> 7/1/1997  <b>Revised:</b> 2/16/2011  <b>Reviewed:</b> 6/17/2015

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7410	Voice Mail (VM) Services	<p>All implementation and usage of Voice Mail systems must adhere to the following minimum acceptable standard. This standard represents acceptable usage and should not adversely affect technology costs. Adherence to this standard is expected regardless of the specific product installed.</p> <p>Effective with issuance of this standard, any and all voice mail system must adhere to this standard. Any exception will be reviewed on a case by case basis. VM equipment currently in place may continue to be used and maintained. When it has reached the end of its useful life and the cost of repair or upgrade exceeds its value, replacement should be considered.</p> <p>The “press 0” option must be announced within the first 15 seconds of the recorded greeting. Staff should also receive training on the proper way to leave greetings and messages in voice mail.</p> <p>All Agency Telephone Coordinators will be trained on proper installation and configuration of these systems. This training can be coordinated through the COT’s Telecommunication Branch. Please see the suggested “Best Practice” statement on page 15 of the document at <a href="https://gotsource.ky.gov/docushare/dsweb/Get/Document-301114/">https://gotsource.ky.gov/docushare/dsweb/Get/Document-301114/</a></p>	A02.030.KY005	Application Components > Unified Communications and Collaboration > Voice Mail	Voice Mail is a centralized electronic system that can store messages from telephone callers.	<p>Approved products are</p> <ul style="list-style-type: none"> <li>• Avaya</li> <li>• Octel</li> </ul> <p>These systems are currently bundled with both Voice Mail and Auto Attendant. For best results, the Voice Mail product must be compatible with the currently installed voice system.</p> <p>When it is determined that Voice Mail is required, configuration and consulting assistance may be obtained from COT by submitting a request to the <a href="mailto:Commonwealthservicedesk@ky.gov">Commonwealthservicedesk@ky.gov</a> or call 502-564-7576</p>	<p><b>Effective:</b> 3/1/2001</p> <p><b>Revised:</b> 2/16/2011</p> <p><b>Reviewed:</b> 6/17/2015</p>



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7415	Enterprise & Desktop Voice Services	<p>Standard features for all office workers entitled to a phone:</p> <ul style="list-style-type: none"> <li>• Re-dial</li> <li>• Analog single-line Phone</li> <li>• Hold</li> <li>• Individual extension/number</li> <li>• Volume control</li> <li>• Call Transfer</li> <li>• Touch Tone (where available)</li> <li>• Standardized color-Black</li> <li>• Accessibility to Voice Mail</li> <li>• Simple documented instructions on how to use features</li> </ul> <p>Available features if needed for ADA compliance:</p> <ul style="list-style-type: none"> <li>• Digital, Programmable Display Phone</li> <li>• Caller ID (where available and policy allows)</li> <li>• Intercom calling</li> <li>• Call Forwarding</li> <li>• Availability of ADA compliant instruments where needed</li> <li>• Multi-line</li> <li>• Speaker Phone</li> <li>• Call Pick-up</li> <li>• Call Parking</li> <li>• Headsets</li> <li>• Remote access to voice mail</li> <li>• Waiting voice mail notification through a stutter dial tone or flashing light.</li> </ul> <p>Additional features available to operators/help desk/call center attendants:</p> <ul style="list-style-type: none"> <li>• Headsets</li> <li>• Direct Station selection (multi-button instrument)</li> <li>• Busy Display</li> <li>• Call Management Tools</li> </ul> <p>Standard enterprise features available for all offices:</p> <ul style="list-style-type: none"> <li>• 800/888 services (part of KIH)</li> <li>• 900 services</li> <li>• 911 services (NENA guidelines prevail)</li> <li>• Access and account codes</li> <li>• ACD</li> <li>• Auto Attendant</li> </ul>	I01.003.302	Platform > Communications Hardware > Telephony Handset	A telephony handset is a device the user holds to the ear to hear the audio sound, usually containing the phone's microphone.	<p>Approved products are:</p> <ul style="list-style-type: none"> <li>• Avaya</li> <li>• Tadiran</li> </ul>	<p><b>Effective:</b> 7/1/2000</p> <p><b>Revised:</b> 2/16/2011</p> <p><b>Reviewed:</b> 6/17/2015</p>

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7415		<ul style="list-style-type: none"><li>• Lobby and common areas (Local and 800 calls only)</li><li>• Elevators (controlled by the elevator company)</li><li>• Conference rooms (full access except 900 services &amp; International calling)</li><li>• Conference speaker phones</li><li>• Common labels on all phone buttons</li><li>• Music on hold (MUZAC or recorded announcements such as what the agency offers, business hours etc.)</li><li>• Single number to call for service 502-564-7576 for moves adds or changes</li></ul> Long distance (LD) use is restricted to government business (employees should use personal calling cards or personal cell phones). See the suggested “Best Practice” statement page 15 of this document.					

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7420	Automated Attendant Systems	<p>All implementation and usage of Automated Attendant systems must adhere to the following, minimum acceptable standard. This standard represents acceptable usage and should not adversely affect technology costs. Adherence to this standard is expected regardless of specific products installed.</p> <ul style="list-style-type: none"><li>• Adherence to all ADA requirements will be required for the use of special devices such as the TTY/TDD.</li><li>• All Agency Telephone Coordinators will be trained on proper installation and configuration of these systems. This training can be coordinated through the COT’s Telecommunication Branch.</li></ul> <p>See the suggested “Best Practice” statement page 16 of this document.</p>	A02.030.KY001	Application Components > Unified Communications and Collaboration > Automated Call Attendant	Software that allows callers to be automatically transferred to an extension without the intervention of an operator/receptionist). Many such software will also offer a simple menu system ("for sales, press 1, for service, press 2," etc.). An auto attendant may also allow a caller to reach a live operator by dialing a number, usually "0".	<p>Approved products are:</p> <ul style="list-style-type: none"><li>• Avaya</li><li>• Octel</li></ul> <p>These systems are currently bundled with both Voice Mail and Auto Attendant. For best results, the Voice Mail product must be compatible with the currently installed voice system. When it is determined that an Automated Attendant is required, configuration and consulting assistance may be obtained from COT by email the Commonwealthservicedesk@ky.gov or calling 502-564-7576</p>	<p><b>Effective:</b> 3/1/2001</p> <p><b>Revised:</b> 2/16/2011</p> <p><b>Reviewed:</b> 6/17/2015</p>

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7425	Automated Call Distribution Systems (ACD)	<p>All implementation and usage of an ACD system must adhere to the following, minimum acceptable standard. This standard represents acceptable usage and should not adversely affect technology costs. Adherence to this standard is expected regardless of specific products installed.</p> <ul style="list-style-type: none"><li>• Equipment currently in place can continue to be used and maintained. When it has reached the end of its useful life and the cost of repair or upgrade exceeds its value, replacement should be considered.</li><li>• An ACD should only be placed upon incoming customer lines. These lines frequently come into a call center or help desk environment.</li><li>• If the ACD is used in conjunction with an Automated Attendant, all standards for that product must also be followed. See the suggested “Best Practice” statement page 16 of this document.</li></ul>	A02.030.KY002	Application Components > Unified Communications and Collaboration > Automated Call Distribution Systems (ACD)	Automated call distribution system, is a device or system that distributes incoming calls to a specific group of terminals or agents based on customer need, type, and agent skill set. It is often part of a computer telephony integration (CTI) system.	<p>Approved products are:</p> <ul style="list-style-type: none"><li>• Avaya:<ul style="list-style-type: none"><li>o Contact Center 6.0 (CC6) or higher</li></ul></li><li>• Tadiran:<ul style="list-style-type: none"><li>o Coral Call Center Jet</li></ul></li></ul>	<p><b>Effective:</b> 3/1/2001</p> <p><b>Revised:</b> 2/16/2011</p> <p><b>Reviewed:</b> 6/17/2015</p>

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7430	Interactive Voice Response (IVR) Services	<p>All implementation and usage of IVR systems must adhere to the following, minimum acceptable standard. This standard represents acceptable usage and should not adversely affect technology costs. Adherence to this standard is expected regardless of specific products installed.</p> <ul style="list-style-type: none"><li>• Equipment currently in place can continue to be used and maintained as long as it continues to be compatible with the switch platform. When it has reached the end of its useful life and the cost of repair or upgrade exceeds its value, replacement should be considered.</li><li>• Adherence to all accessibility and ADA requirements will be required for the use of special devices such as the TTY/TDD.</li><li>• If required, IVR systems must be programmed to interface with appropriate relational database management software product standards defined in KITS.</li></ul> <p>Configuration and consulting assistance must be obtained from COT’s Division of Communication Services, Network Engineering Branch, for these systems. See the suggested “Best Practice” statement page 16 of this document.</p>	A02.030.KY006	Application Components > Unified Communications and Collaboration > Interactive Voice Response (IVR) Services	Interactive voice response (IVR) is a technology that allows a computer to interact with humans through the use of voice and DTMF tones input via keypad.	<p>There are two vendors approved to provide outsourced IVR consulting, applications development, integration, implementation and operational support services. These are:</p> <ul style="list-style-type: none"><li>• Anexsys</li><li>• GovConnect</li></ul>	<p><b>Effective:</b> 3/1/2001</p> <p><b>Revised:</b> 6/17/2015</p> <p><b>Reviewed:</b> 6/17/2015</p>

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7435	Computer and Telephone Integration (CTI) Systems	<p>All implementation and usage of CTI systems must adhere to the following, minimum acceptable standard. This standard represents acceptable usage and should not adversely affect technology costs. Adherence to this standard is expected regardless of specific products installed.</p> <ul style="list-style-type: none"> <li>• Equipment currently in place can continue to be used and maintained. When it has reached the end of its useful life and the cost of repair or upgrade exceeds its value, replacement should be considered.</li> <li>• Some CTI applications can be very proprietary, requiring specialized equipment and telephones. These systems must be avoided in favor of “open” systems and architectures that can function with Web interfaces and other newer technologies that may become available.</li> <li>• CTI systems must be compliant with existing database standards as defined in the Commonwealth of Kentucky IT Enterprise Architecture and Standards documents.</li> <li>• Sensitivity and security need to be considered when phrasing the questions and gathering the data during one of these sessions. The data collected and stored in a database must adhere to existing security and privacy standards adopted by the Commonwealth. (Reference Web site: Chief Information Security Officer - Services)</li> <li>• When these systems are used to conduct e-Business by buying products, authorizing payments, etc., care should be taken as it relates to security and privacy issues. (Reference standard 5515 “Secure Transport”.)</li> <li>• Adherence to all ADA requirements will be required for the use of special devices such as the TTY/TDD.</li> </ul>	I01.005.KY001	Platform > Virtualization > Computer and Telephone Integration (CTI) Systems	Computer and Telephone Integration (CTI) Systems allow interactions on a telephone and a computer to be integrated or coordinated.	<p>Approved products are:</p> <ul style="list-style-type: none"> <li>• Alcatel-Lucent</li> <li>• Avaya</li> </ul>	<p><b>Effective:</b> 3/1/2001</p> <p><b>Revised:</b> 6/17/2015</p> <p><b>Reviewed:</b> 6/17/2015</p>

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7440	VoIP	<p>VoIP must be delivered in a secure environment. Category 5 Cabling infrastructure is the minimum requirement. The agencies network switches and data circuitry must be able to accommodate the VoIP application. POE must be available. The VoIP solution must be able to interface with all applications in the related categories.</p> <p>See VoIP IT Standard General Requirements (page 16 of this document) for:</p> <ul style="list-style-type: none"> <li>• Switch Acceptance</li> <li>• Network Event Analysis</li> </ul>	I02.004.401	Network > Transmission Type > Voice over IP (VoIP)	<p>Voice over IP (VoIP, or Voice over Internet Protocol) commonly refers to the communication protocols, technologies, methodologies, and transmission techniques involved in the delivery of voice communications and multimedia sessions over Internet Protocol (IP) networks, such as the Internet. Other terms commonly associated with VoIP are IP telephony, Internet telephony, Voice over Broadband (VoBB), broadband telephony, IP communications, and broadband phone. Internet telephony refers to communications services — voice, fax, SMS, and/or voice-messaging applications — that are transported via the Internet, rather than the Public Switched Telephone Network (PSTN). The steps involved in originating a VoIP telephone call are signaling and media channel setup, digitization of the analog voice signal, encoding, packetization, and transmission as Internet Protocol (IP) packets over a packet-switched network. On the receiving side, similar steps (usually in the reverse order) such as reception of the IP packets, decoding of the packets and digital-to-analog conversion reproduce the original voice stream.</p> <p>Even though IP Telephony and VoIP are terms that are used interchangeably, they are actually different; IP telephony has to do with digital telephony systems that use IP protocols for voice communication, while VoIP is actually a subset of IP Telephony. VoIP is a technology used by IP telephony as a means of transporting phone calls.</p>	<p>Approved products are:</p> <ul style="list-style-type: none"> <li>• Avaya</li> </ul>	<p><b>Effective:</b> 4/15/2009</p> <p><b>Revised:</b> 6/17/2015</p> <p><b>Reviewed:</b> 6/17/2015</p>

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7445	VoIP softphone	VoIP must be delivered in a secure environment. The agencies network must be able to accommodate the VoIP application. The VoIP solution must be able to interface with all applications in the related categories. The softphone is a software application loaded on a desktop or laptop computer that enables the employee to utilize the computer keyboard, microphone, and speakers to make and receive calls. Operation is dependent on version of computer hardware/software.	A02.030.363	Application Components > Unified Communications and Collaboration > Instant Messaging	Software that supports text, voice and/or video communications between two or more users.	Approved products are: • Avaya i2050	<b>Effective:</b> 4/15/2009  <b>Revised:</b> 6/17/2015  <b>Reviewed:</b> 6/17/2015
7450	Desktop Unified Messaging / Faxing	Desktop messaging will be available on employee's desktop computer with the correct version of computer operating software and correct version of Microsoft Outlook. Manufacturer specifications will need to be adhered to in compliance with approved standards for operating systems and email.	A02.030.363	Application Components > Unified Communications and Collaboration > Instant Messaging	Software that supports text, voice and/or video communications between two or more users.	Approved products are: • Avaya	<b>Effective:</b> 4/15/2009  <b>Revised:</b> 2/16/2011  <b>Reviewed:</b> 6/17/2015



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7560	Enterprise Directory Services	<p>Single primary forest multiple domain architecture with cabinets as domains or organizational units (OU) and agencies designated as organizational units (OU). Requests for separate Cabinet Level forests are required.</p> <ul style="list-style-type: none"><li>• Enabled for Lightweight Directory Access Protocol (LDAP); LDAP version 2 and LDAP version 3.</li><li>• IP based Domain Naming System (see Category 4005).</li><li>• Support for X.400 messaging protocol.</li><li>• Compatible with Enterprise Standards product(s) in Category 2600 - Electronic Mail.</li><li>• Compatible with Enterprise Standards product(s) in Category 3300 - Router and Category 5700 - Firewall.</li><li>• Multiple platform server support: Approved Windows products in Enterprise Standards Category 2110 – Operating System Server.</li><li>• Multiple desktop client operating systems support Windows products in Category 2100 – Operating System (O/S) – Desktop and Laptop/Notebook.</li><li>• Active Directory Federated Services - Webservices\SAML 2.0 tokens<ul style="list-style-type: none"><li>ADFS 1.0 - Windows Server 2003 R2 (additional download) - end of life July 2015</li><li>ADFS 1.1 - Windows Server 2008 and Windows Server 2008 R2 - end of life July 2015</li><li>ADFS 2.0 - Windows Server 2008 and Windows Server 2008 R2 - end of life July 2015</li><li>ADFS 2.1 - Windows Server 2012 - end of life July 2015</li><li>ADFS 3.0 - Windows Server 2012 R2</li></ul></li></ul>	A02.029.340	Application Components > Security Controls > Authentication and Authorization	Software that supports obtaining information about parties attempting to log on to a system or application for security purposes and the validation of those users.	<p>Approved products are:</p> <ul style="list-style-type: none"><li>• Microsoft Active Directory</li></ul>	<p><b>Effective:</b> 2/1/2000</p> <p><b>Revised:</b> 6/17/2015</p> <p><b>Reviewed:</b> 6/17/2015</p>